Background—Why a Toolbook and What Types of Information Does it Offer?

Manufacturers face a number of barriers as they seek to modernize and remain competitive and they often feel isolated in their quest for the support they need to address these hurdles. However, they are not alone in their search for financing and technical assistance. Many companies, in numerous sectors, and in all types of situations have overcome them. This toolbook intends to build on these successes and provide a range of information that can help manufacturers address these problems.

What Is Really Out There?

A multitude of private financing sources are out there, ranging from traditional banks to energy service companies (ESCOs) to venture capital "angels"— wealthy individuals looking for an innovative way to invest. However, manufacturers typically have little contact with such sources, and may not even be aware of them. Billions of dollars worth of Federal and State financing resources are also available through a number of programs— but ***manufacturers must get a sense which are most appropriate and gain an understanding of how these programs work. They must also be able to show that their needs coincide with program missions and that their needed projects can be shaped to meet program eligibility requirements and award criteria.***

Not all manufacturers will need, or be interested in, all of the information offered in this toolbook. This reflects their diversity as well as the different barriers they face. The following description of the sections is intended to help direct readers to those sections that will be of greatest use to them.

What Will This Toolbook Do For Manufacturers?

This toolbook is designed to help manufacturers work through key issues and alternatives relating to financing manufacturing modernization. Some manufacturers may choose to read the entire document, to get a full flavor of the barriers to and opportunities for financing efficiency and other improvements. Others will want to concentrate on different types of available assistance, such as loan guarantees or equity capital, in order to learn what resources could best fit their needs. Still others will want to use the toolbook to gain a firmer grasp of the rationales behind certain lender decisions, or to decide which private financier may be best suited to their situation. In any situation, the toolbook can help manufacturers advance their efforts to become more efficient and more competitive. Manufacturing matters!

What Is In the Toolbook?

The Toolbook is divided into the following six sections:

Section One

The Background section sets the stage for financing manufacturing projects and provides an overview of public and private financing resources and private lender concerns. It explains the types of financing manufacturers need at various stages in their evolution and types of public-sector tools suitable for manufacturers—debt, equity, tax incentives, and grants—and key factors affecting the use of each.

Section Two

Financing Options, Techniques, and Strategies describes the types of financing for manufacturers to consider and lists the various methods manufacturers can turn to for financing help including:

- Federal or State assistance;
- commercial loans;
- lease-purchase or vendor financing programs;
- energy services or shared savings contracts;
- utility rebates or incentives;
- company cash flow; and
- equity financing.

Section Three

The third section provides case studies which show the modernization process from the assessment stage to the financing stage. The specific technology upgrades are discussed and their costs, payback, and energy savings are shown.

Section Four

The fourth section focuses on more than a dozen Federal financial and technical assistance programs, focusing on key offerings of the Department of Energy's Office of Industrial Technologies and the Small Business Administration which manufacturers have found to be effective. These are profiled in detail and include

- program objectives or mission;
- the services they offer and what they cost;
- who's eligible and how to apply;
- conditions and considerations—how the programs work in practice;
- pertinent program data (such as top participating lenders or level of energy savings achieved); and
- regional and headquarters program contacts for more information.

Section Five

The fifth section is a State-by-State look at financing and technical assistance programs best suited to meet the needs of manufacturers within this region. Programs are briefly profiled and a contact given.

Section Six

The last section consists of information provided by participating organizations describing their operations and the types of financial or technical services they provide to advance manufacturing modernization and efficiency initiatives within this region. Participating organizations include

- private lenders;
- financial service providers;
- utilities;
- nonprofit development organizations;
- State and local agencies;
- Federal agencies.

What Are Some of the Financing Issues Manufacturers Face?

Adequate amounts of investment capital at affordable terms are necessary if manufacturers are to modernize and compete. Plenty of capital is available nationally, but many manufacturers have trouble gaining access to the money they need at affordable rates. This is especially true for small producers who often have great difficulty in securing financing. Many cannot obtain capital either for long-term investments in plant and equipment or short-term funds for materials to build inventory.

In addition, the normal problems associated with underwriting reviews of loan applications are complicated by several factors, including:

- lender uncertainty about the viability of proposed production process-related changes;
- lender adversity to operations involving new technologies that the bank has had little experience evaluating; and,
- the environmental uncertainties that many lenders associate with manufacturing projects (in terms of lender liability and collateral devaluation).

Why Do Lenders Operate This Way?

Financing institutions typically limit their lending to low-risk propositions, so manufacturers may have more success in the money markets if they understand the reasons why lenders operate the way they do. One of the most important reasons is lenders’ concerns over how their own regulators will view the viability of their bank operations and lending practices. The Federal Office of the Comptroller of the Currency and other bank regulators have laid down specific loan performance criteria for lenders to meet, and no financial institution wants the stigma of too many bad or “nonperforming” loans.

In practice, this means that lenders are most comfortable with certainty, with things they know, and processes they understand. As a result, many often view innovations or new technologies as situations to be avoided in favor of other types of lending. Many small manufacturers, in fact, are not able to land long-term capital or construction loans at any price; they are viewed as too risky. Their owners often lack enough collateral to meet underwriting requirements or enough cash to meet loan processing costs and environmental assessment requirements. While product development initiatives, new technologies, and efficiency improvements receive a lot of attention from public and corporate leaders, they often are viewed skeptically by bank underwriters, who may finance only a fraction of the project's value—if they offer any capital at all. Innovative projects without a record of success and certainty often do not compete well in financial markets because lenders, looking to their own bottom line, are not sufficiently convinced that they will be repaid.

Individual institutions determine their own lending procedures to avoid this stigma, and these procedures vary. Some lenders have developed a speciality and an in-house expertise in certain types of lending, such as manufacturing equipment and facilities. Because they understand the needs, the practical risks, and true nature of collateral value in such circumstances, they are likely to be much more receptive to a loan request from an industrial company than a financier that focuses on shopping centers or commercial businesses.

What Kinds of Financing Do Manufacturers Need?

Manufacturers face different types of financing needs as they go through various business cycles and as their companies evolve. ***Manufacturers need to recognize these variations, so they can devise the right approach for seeking financing, pick the right lender to approach for assistance, and make their best case to loan reviewers***. No matter what type of operation or its location, manufacturers must secure several types of credit to do business.

- **Short-term loans**, made for less than one year, cover immediate production costs; such loans are available only if the business can generate the cash flow to redeem them during the same period.
- **Working-capital loans** purchase raw materials or help a company operate after sales are made but before payments are received; they are absolutely essential for most small and medium-sized manufacturers, which typically lack a cash-flow cushion. (ESCOs and performance contracting can meet this type of need.)
- **Equity investment**, venture capital-type funding, makes available the block of capital needed for major capital projects such as new product development; venture investors typically take a portion of the company in return for their investment, usually in the form of stock.
- **Long-term loans** purchase capital equipment, and construct or rehabilitate production facilities; generally they are repaid in installments over a period pegged to the life of the assets.
- **Lines of credit** are loans that banks make available up to a prearranged level for a short time (usually 90 days); usually secured by accounts receivable, lines of credit help overcome cash shortages resulting from the normal delays when customers process invoices and send payments.

Finally, manufacturers that produce for foreign customers will have to be able to secure letters of credit. These are, in essence, a type of commercial loan used to finance international transactions involving the shipment of merchandise.

How Can the Public-Sector Help?

What do State programs do, and how can they help manufacturers gain access to needed financing? Several Federal agencies and nearly all States have devised financing tools to help manufacturers gain access to the money they need for efficiency and production process improvements. Some of these tools are relatively simple, like loan or grant programs; others are quite sophisticated, such as equity investment initiatives. The structure of these tools vary; some offer direct financial assistance while others provide indirect incentives via the tax code.

Manufacturing needs are as diverse as the industrial sectors they represent. Therefore, no one "best" public sector financing approach will fit all modernization and energy efficiency needs. As indicated below and in Section 4, the options are many. ***Manufacturers need to remember that while their common mission is linking companies to necessary resources, their goals and strategies will differ, and this may affect the choice of tools.*** Public programs are designed to meet one or more of the following goals to help make projects work, including:

- Reducing the lender's risk, making capital more available by providing incentives such as loan guarantees to attract private lender participation;
- Reducing the borrower's cost of financing, for example, by making capital more affordable with reduced interest rates or by using assistance programs that reduce loan underwriting and documentation costs;
- Improving the financial situation of the manufacturer seeking financing, by providing incentives such as tax credits or abatements that can help improve the project's cash flow; and
- Providing greater comfort to lenders or investors, through technical assistance information or programs that show that planned improvements will yield the benefits they claim.

Manufacturers need to know where to look for help. At the Federal level, some financing tools are administered directly by Federal agencies; others by authorized private development companies or similar organizations; still others by local development agencies or nonprofit institutions or corporations, in accordance with Federal rules and in conjunction with Federal agency partners. Similar variations are found in State programs.

Types of Financial Assistance

The financing tools available to manufacturers take many forms, but four types predominate: debt, equity, tax incentives, and grants. Different tools are best suited to different needs, and ***manufacturers need to understand these variations in order to come up with the best fit with their financing needs.***

Debt–Loans, Loan Guarantees, and Other Tools. Most public assistance to manufacturers seeks to make financial resources more available to businesses through loans, loan guarantees, and various types of interest subsidies. ***Manufacturers should recognize that the general goal of all these programs is this: to make loan capital more available at the best rates and terms possible.***

At the same time, manufacturers need to understand the context in which all these programs operate, namely, that they are usually available to all qualifying businesses, no matter what sector of the economy. Most programs only limit company participation on the basis of size (usually, number of employees or annual sales).

The Small Business Administration (SBA) is the leading Federal agency in this arena; many States have similar programs in place as well. These programs either subsidize the cost of capital or help ensure its availability. Typically, rates of interest are at or below prevailing market rates, depending on the program's objectives and constituency. These debt programs often are used to help attract capital for expansion projects or general business operation. They also seek to support promising firms that private lenders view as high risk, as well as otherwise solid companies unable to meet standard commercial lending terms.

Depending on the specifics of any given program (i.e., what's eligible for assistance, private match required, etc.) manufacturers can use them for a variety of business capital needs—financing building construction, acquiring equipment and machinery, funding plant expansions, or supporting export activity. Some programs meet a company's need for working capital, chronically in short supply for smaller manufacturers. In recent years, SBA loan guarantees have helped a number of manufacturers who needed capital to incorporate new technologies or make important efficiency improvements.

Debt programs are designed to improve the availability and affordability of capital. ***Manufacturers need to realize, though, that most public program officials follow their own guidelines to minimize risk, and these may be rigid as well.*** They are accountable to State or Federal agency oversight, and are just as concerned about business failure as their private-sector counterparts. Therefore, to the extent, they can, ***manufacturers need to shape their requests for financial assistance to meet the requirements of the program being considered***. As a result, capital access remains a problem for many new or small operations, despite considerable State and Federal attempts to improve it.

Although debt financing is the primary Federal financing approach, and well suited to many situations, ***manufacturers need to realize that debt programs will not work in every case.*** Loans and loan guarantees may not fit with the financial needs of various new or expanding business situations, modernization or efficiency improvements, or of manufacturers engaged in technology-related projects. Many such firms, while economically sound overall, have initial cash-flow difficulties, and debt programs require a constant stream of repayments beginning almost immediately. Manufacturers trying to modernize or diversify often must borrow considerable sums to invest in production facilities and equipment. As small manufacturers are only too well aware, many small firms fail—not from lack of demand for their products or services—but because they cannot meet debt installments. The time lag on accounts receivable, for instance, can cause an insurmountable cash-flow barrier for small businesses.

Equity. Equity-finance programs can address concerns over cash flow, because they do not feature a strict repayment schedule. Equity programs make capital more available through direct investment (and a potential return based on the success of the company), rather than by lump-sum loan proceeds (which must be repaid in installments). They promote development by investing funds in capital-poor but otherwise competitive enterprises, many of which are technologically innovative. Equity programs on a significant scale are a relatively new public-sector financial assistance phenomenon. A few States have explored venture capital-style assistance programs. At the Federal level, only SBA's Small Business Investment Company (SBIC) operates as an equity assistance program.

In terms of equity programs, ***manufacturers need to realize that, in practice, SBA and similar State programs makes equity investments much like a private equity investor or venture capitalist***. SBA and its program partners—licensed Small Business Investment Companies (SBICs) are looking for deals that work. Investors, (in the case of SBA programs, through the SBICs), take an ownership interest in a company in exchange for funds. Equity is a riskier channel of investment than debt. If there are no profits or the business folds, the investor makes nothing or even loses its money. On the other hand, if the company does well, the investor (private, State or SBIC) can reap a substantial return.

Equity programs operate more like a stock purchase than a debt investment, structured to give a company relief from redeeming its obligation until a certain level of return is reached. In contrast to debt financing, equity usually is more "patient" money. Because returns are a function of profit, and profit is linked to the company's success, they are not expected immediately. The timing and size of payments are geared to the company's financial condition, thus removing early cash-flow pressures and giving the firm time to use its cash to advance restructuring or modernization efforts. At the same time, though, investors usually expect a greater return on an equity investment than traditional lenders do from loans.

Tax Incentives. The only significant Federal tax incentives specifically targeted to manufacturers are tax-exempt industrial development bonds (IDBs) which can be used for a variety of financial needs including site preparation and equipment acquisition. IDBs are available in every State, and each State sets its own eligibility conditions and authorizes its own set of issuing entities; typically, they include State agencies, local governments, development authorities, and similar organizations.

State and local governments offer most of the tax incentives to promote manufacturing activity, including abatements, investment incentives, exemptions or moratoriums for capital improvements, and incentives for job creation. State and local tax incentives often are linked to or packaged with Federal financing assistance. They are offered on the premise that reducing taxes lowers the cost of doing business in an area, making it more attractive for companies to locate there or to maintain or expand existing operations. The latter rationale often is cited when long-time manufacturing companies seek help to retool. Thus, ***manufacturers can make a stronger case for State and local tax relief or tax-code linked assistance by showing the community impact and local benefits of their proposed project.***

Grants. Many manufacturers, when they decide to seek public financing assistance, think of grants. Grants are direct transfers of money to the recipient, usually with no payback obligation. ***Manufacturers need to know that little direct grant assistance is available, and the competition for it is fierce***—and not just from other companies, but also from health care facilities and social service organizations. The average grant dollar amounts for each project are kept as low as possible because grants are designed to help leverage other sources of financing. Many grants are cost-shared—requiring financial commitments from grant recipients. Most grants are done as "pass throughs"—funds are provided to an intermediary, such as a city or development organization, which, in turn, provides funds to the private company. Virtually all Federal grant assistance is delivered this way.

In short, ***manufacturers can tap several types of public resources***, and use them in a variety of ways to help finance manufacturing efficiency and modernization projects, develop new technologies and products, and help attract private investment. ***The most suitable approach depends on the specifics of any given program, the current development climate in a given area, and the financial requirements of the companies wanting to carry out improvements***. It is limited only by the creativity of the participants.